

Amendments to the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): A method for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be reproduced in synchronization~~the same reproduction time-line with the AV data, and the associated data is reproduced by switching~~ with the AV data,

the method comprising:

a first-step of dividing the AV data into partial AV data based on a unit that the AV data is synchronized reproduced by switching with the associated data, and of dividing the associated data into partial associated data based on a unit that the associated data is synchronized reproduced by switching with the AV data;

a second-step of securing, in the recording medium, a first continuous region for continuously storing the partial AV data and the partial associated data, which are to be synchronized reproduced by switching with each other;

a third-step of continuously recording the partial AV data and the partial associated data onto the first continuous region; and

a fourth-step of recording, onto the recording medium, file system management information for (i) managing the partial-AV data and the partial-associated data as different files, and (ii) managing information for handling the partial-AV data and the partial-associated data as the different files.

Claim 2 (currently amended): The method as set forth in claim 1, further comprising:

a fifth-step of recording, onto the recording medium, (i) reproduction start time of the partial AV data, and (ii) correspondence information of the partial AV data and the partial associated data, both of which are disposed in the first continuous region.

Claim 3 (currently amended): The method as set forth in claim 1, further comprising:
a ~~sixth~~-step of recording, onto the recording medium, information indicating whether or not the partial associated data is recorded adjacent to the corresponding partial AV data.

Claim 4 (currently amended): A method for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be synchronized-reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

the method comprising:

a ~~first~~-step of dividing the AV data into partial AV data in accordance with a predetermined interval;

a ~~second~~-step of securing a first continuous region including a series of the partial AV data and a second region for securing, during recording of the associated data, a region for storing the associated data corresponding to the partial AV data; and

a ~~third~~-step of recording, onto the recording medium, file system management information for (i) managing the ~~partial~~-AV data and the second region as different files, and (ii) managing information for handling the ~~partial~~-AV data and the second region as different files.

Claim 5 (currently amended): The method as set forth in claim 4, further comprising:

a ~~fifth~~-step of dividing, during the recording of the associated data, the associated data into partial associated data in accordance with a predetermined interval;

a ~~sixth~~-step of recording, during the recording of the associated data, the partial associated data onto the second region that is stored in continuity with relevant partial AV data; and

a ~~seventh~~-step of recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the ~~partial~~-associated data as a file different from ~~respective files of the~~ partial AV data and the second region, and (ii)

managing information for handling the ~~partial~~-associated data as a file different from ~~respective files of the~~ partial-AV data and the second region.

Claim 6 (currently amended): The method as set forth in claim 4, further comprising:

~~an eighth~~^a step of recording, onto the recording medium, (i) reproduction start time of the partial AV data, and (ii) correspondence information of the partial AV data and the partial associated data, both of which are disposed in the first continuous region.

Claim 7 (currently amended): The method as set forth in claim 4, further comprising:

a ninth-step of recording, onto the recording medium, information indicating whether or not the partial associated data is recorded adjacent to the corresponding partial AV data.

Claim 8 (currently amended): An AV data recording apparatus for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be synchronized-reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

the AV data recording apparatus comprising:

means for dividing the AV data into partial AV data based on a unit that the AV data is synchronized-reproduced by switching with the associated data, and for dividing the associated data into partial associated data based on a unit that the associated data is synchronized-reproduced by switching with the AV data;

means for securing, in the recording medium, a first continuous region for continuously storing the partial AV data and the partial associated data, which are to be synchronized reproduced by switching with each other;

means for continuously recording the partial AV data and the partial associated data onto the first continuous region; and

means for recording, onto the recording medium, file system management information for (i) managing the ~~partial~~-AV data and the ~~partial~~-associated data as different files, and (ii)

managing information for handling the ~~partial~~-AV data and the ~~partial~~-associated data as different files.

Claim 9 (currently amended): An AV data recording apparatus for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be reproduced in synchroism the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

the AV data recording apparatus comprising:

means for dividing the AV data into partial AV data in accordance with a predetermined interval;

means for securing a first continuous region including a second region for securing, during recording of the associated data, a region for storing the associated data corresponding to the partial AV data; and

means for recording, onto the recording medium, file system management information for (i) managing the ~~partial~~-AV data and the second region as different files, and (ii) managing information for handling the ~~partial~~-AV data and the second region as different files.

Claim 10 (currently amended): The AV data recording apparatus as set forth in claim 9, further comprising:

means for dividing, during the recording of the associated data, the associated data into partial associated data in accordance with a predetermined interval;

means for recording, during the recording of the associated data, the partial associated data onto the second region that is stored in continuity with relevant partial AV data; and

means for recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the ~~partial~~-associated data as a file different from ~~respective files~~ of the ~~partial~~-AV data and the second region, and (ii) managing information for handling the ~~partial~~-associated data as a file different from ~~respective files~~ of the ~~partial~~-AV data and the second region.

Claim 11 (currently amended): A-An apparatus, which can playback an AV data, readable data recording medium for storing (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be synchronized-reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

wherein:

the data recording medium continuously stores (i) partial AV data obtained by dividing the AV data based on a unit that the AV data is synchronized-reproduced by switching with the associated data, and (ii) partial associated data obtained by dividing the associated data based on a unit that the associated data is synchronized-reproduced by switching with the AV data; and

the data recording medium stores file system management information for (i) managing the partial AV data and the partial associated data as different files, and (ii) managing information for handling the partial AV data and the partial associated data as different files.

Claims 12-13 (canceled)

Claim 14 (currently amended): A computer readable recording medium for storing the-a program as set forth in claim 12 or 13 for causing a computer to record onto a recording medium (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

the program causing the computer to perform:

a step of dividing the AV data into partial AV data based on a unit that the AV data is reproduced by switching with the associated data, and of dividing the associated data into partial associated data based on a unit that the associated data is reproduced by switching with the AV data;

a step of securing, in the recording medium, a first continuous region for continuously storing the partial AV data and the partial associated data, which are to be reproduced by switching with each other;

a step of continuously recording the partial AV data and the partial associated data onto the first continuous region; and

a step of recording, onto the recording medium, file system management information for (i) managing the AV data and the associated data as different files, and (ii) managing information for handling the AV data and the associated data as the different files.

Claim 15 (currently amended): The method as set forth in claim 4, further comprising:

 a tenth-step of recording, during the recording of the associated data, the associated data onto the second region that is stored in continuity with relevant partial AV data; and

 an eleventh step of recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the associated data as a file different from respective files of the partial AV data and the second region, and (ii) managing information for handling the associated data as a file different from respective files of the partial AV data and the second region.

Claim 16 (previously presented): The method as set forth in claim 4, wherein:

 upon the creation of the second region, a size of the second region is determined in consideration of occurrence of a defect.

Claim 17 (currently amended): The AV data recording apparatus as set forth in claim 9, comprising:

 means for recording the associated data onto the second region that is stored in continuity with relevant partial AV data; and

 means for recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the associated data as a file different from respective files of the partial AV data and the second region, and (ii) managing information for handling the associated data as a file different from respective files of the partial AV data and the second region.

Claim 18 (currently amended): A-An apparatus, which can playback an AV data, readable data recording medium that can store (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be synchronized reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

wherein:

the AV data is divided into partial AV data in accordance with a predetermined interval;
the AV data is recorded such that a series of the partial AV data is positioned in continuity with a second region for securing a region for storing associated data corresponding to the partial AV data;
the data recording medium stores file system management information for (i) managing the partial AV data and the second region as different files, and (ii) managing information for handling the partial AV data and the second region as different files.

Claim 19 (previously presented): The method as set forth in claim 1, wherein:

the partial AV data is constituted by the integral number of individually reproducible units.

Claim 20 (currently amended): The method as set forth in claim 19, further comprising:
a ~~seventh~~-step of recording information indicating whether or not each of the individually reproducible units is positioned in a head of the partial AV data.

Claim 21 (new): A computer readable recording medium for storing a program for causing a computer to record onto a recording medium (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, and (ii) associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data,

the program causing the computer to perform:
a step of dividing the AV data into partial AV data in accordance with a predetermined interval;

a step of securing a first continuous region including a second region for securing, during recording of the associated data, a region for storing the associated data corresponding to the partial AV data; and

a step of recording, onto the recording medium, file system management information for (i) managing the AV data and the second region as different files, and (ii) managing information for handling the AV data and the second region as the different files.